

**WHAT IS CLAIMED IS:**

- 1           1.       A shape cutting system for cutting a material having a surface, the system  
2 comprising:  
3                   a cutting unit including  
4                         a frame having a lower support surface,  
5                         a blade adjustment assembly coupled to the frame, and  
6                         a blade assembly coupled to the frame, the blade assembly  
7 positioned at least partially within the frame such that a longitudinal axis of the blade  
8 assembly is substantially perpendicular to the lower support surface of the frame, the  
9 blade assembly including a blade retainer and a blade connected to the retainer, the  
10 retainer having a rigid collar, and the blade assembly rotatable about the longitudinal  
11 axis; and  
12                   at least one template having first and second substantially flat surfaces, a  
13 periphery and at least one edge defining at least one opening, the lower support surface of  
14 the frame configured for contacting at least one of the first surface of the template and the  
15 material to be cut, the second surface of the template configured for placement upon the  
16 material to be cut, the rigid collar of the retainer configured to operatively engage at least  
17 one of the periphery and the edge of the opening of the template, thereby enabling the  
18 blade to cut a shape in the cutting material which assimilates the shape of at least a  
19 portion of the at least one of the periphery and the edge.
- 1           2.       The shape cutting system of claim 1 further comprising a cutting mat, the  
2 cutting mat configured for placement under the material to be cut, the template and the  
3 cutting unit.
- 1           3.       The shape cutting system of claim 1 wherein the cutting unit includes a  
2 cap covering the lower surface of the frame and the lower portion of the blade assembly.

1           4.       The device of claim 1 wherein the frame includes a base and a housing  
2       coupled to the base, wherein the housing is configured to enclose at least a portion of the  
3       blade adjustment assembly and the blade assembly, wherein the blade assembly extends  
4       along a first axis, and wherein the lower surface of the base defines a plane which is  
5       substantially perpendicular to the first axis.

1           5.       The device of claim 1 wherein the frame includes a compartment for  
2       storing at least one spare blade assembly.

1           6.       The device of claim 4, wherein the blade assembly is rotatable about the  
2       first axis in at least one of a clockwise and a counterclockwise direction.

1           7.       The device of claim 1 wherein the blade adjustment assembly includes a  
2       blade operating mode indicator for indicating the approximate amount of downward  
3       pressure applied to the blade during operation.

1           8.       The device of claim 7 wherein the blade operating mode indicator  
2       indicates which of at least a first and a second operating mode the device is operating in.

1           9.       The device of claim 8 wherein the first operating mode is a free-form  
2       cutting mode and wherein the second operating mode is a template cutting mode.

1           10.      The template of claim 1 wherein the template is made of a generally  
2       transparent tinted material, and wherein the material of the template includes an edge  
3       glow substance operably disposed with structure of template surfaces to redirect light  
4       toward the periphery and the edge of the at least one opening of the semi-transparent  
5       material.

1           11.      A device for rendering shapes upon a material wherein the device may be  
2       used in conjunction with at least one template, the device comprising:  
3                   a frame including

4                   a base including a substantially flat lower surface for supporting  
5 the device on one of the material to be cut and the at least one template, and  
6                   a housing being coupled to the base, the housing having first and  
7 second interconnected openings, the housing supported by the base in at least one  
8 position above the lower surface of the base;  
9                   a marking device adjustment assembly coupled to the housing at the first  
10 opening; and  
11                  a marking device assembly operatively coupled to the marking device  
12 adjustment assembly, the marking device assembly at least partially enclosed by the  
13 housing at the second opening of the housing, the second opening of the housing sized to  
14 enable a lower portion of the marking device assembly to partially and adjustably extend  
15 through the second opening, and to prevent the marking device assembly from fully  
16 extending through the second opening.

1           12.    The device of claim 11 wherein the frame includes a compartment for  
2 storing at least one spare marking assembly.

1           13.    The device of claim 11 wherein the marking device assembly includes a  
2 marking device retainer and a marking device, wherein the marking device is selected  
3 from the group consisting of a cutting blade and a writing implement, and wherein the  
4 marking device retainer includes a lower collar for engaging the template during  
5 operation.

1           14.    The device of claim 11 wherein the frame is made of a generally  
2 transparent material.

1           15.    The device of claim 11 wherein the marking device adjustment assembly  
2 includes a marking device operating mode indicator for indicating the general amount of  
3 pressure applied to the marking device for marking the material.

1           16.     The device of claim 15 wherein the marking device operating mode  
2     indicator indicates which of at least first and second operating modes the device is  
3     operating in.

1           17.     The device of claim 16 wherein the first operating mode is a free-form  
2     rendering mode and wherein the second operating mode is a template rendering mode.

1           18.     The device of claim 11 further comprising a cap releasably connected to  
2     the base, the cap substantially covering the base and generally covering a lower end of  
3     the marking device.

1           19.     The device of claim 11 wherein the marking device adjustment assembly  
2     and the marking device assembly are removably coupled to the housing such that the  
3     marking device assembly can be replaced without the use of tools.

1           20.     The device of claim 11 wherein the frame further comprises an arm  
2     connecting the base and the housing and wherein the frame is configured for one hand  
3     operation.

1           21.     A device for rendering shapes upon a material wherein the device may be  
2     used in conjunction with at least one template, the device comprising:

3                     a frame having a substantially flat lower surface for contacting one of the  
4     material to be cut and the template, the flat lower surface sized to support the device in an  
5     upright position;

6                     a marking device adjustment assembly coupled to the frame; and

7                     a marking device assembly at least partially enclosed by the frame and  
8     operatively coupled to the marking device adjustment assembly, the frame having a  
9     storage compartment for storing at least additional marking device assembly.

1           22.     The device of claim 21 wherein the frame further includes a base having  
2     the substantially lower surface, a housing at least partially enclosing the marking device

3 assembly, and an arm connecting the base to the housing, and wherein the arm has the  
4 storage compartment.

1 23. The device of claim 21 further comprising a cap removably connected to  
2 the lower side of the frame, the cap covering the lower end of the marking device  
3 assembly.

1 24. The device of claim 21 wherein the marking device adjustment assembly  
2 includes a marking device operating mode indicator for indicating the approximate  
3 amount of pressure applied to the marking device during operation.

1 25. The device of claim 21 wherein the marking device adjustment assembly  
2 is adjustably positionable in a plurality of positions and wherein each position of the  
3 marking device adjustment assembly results a different amount of downward pressure  
4 applied to the marking device.

1 26. The device of claim 21 wherein the marking device is a blade assembly  
2 and wherein the blade assembly includes at least one of a single edged blade, a double  
3 edged blade and a rotary blade.

1 27. A template for facilitating the rendering of shapes onto a material by a  
2 rendering device, the template comprising:

3 a substantially flat sheet having first and second sides, a periphery and at  
4 least one opening extending from the first side to the second side, the first side of the  
5 sheet configured for placement upon the material to be cut, the second side of the sheet  
6 configured to contact the rendering device, the sheet made of a semi-transparent tinted  
7 template material, the first side laterally extending at the periphery and at the at least one  
8 opening farther than the second side to define a chamfer at the periphery and at the at  
9 least one opening of the template.

- 1           28.     The template of claim 26 wherein the template material includes an edge
- 2     glow material configured to redirect light toward the periphery and the edge of the at
- 3     least one opening of the semi-transparent material.